



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,888	04/08/2004	Philip Shi-Lung Yu	YOR920040112US1	8874
55459 7590 08/28/2009 GEORGE A. WILLINGHAN, III AUGUST LAW, LLC P.O. BOX 19080 BALTIMORE, MD 21284-9080			EXAMINER BETT, JACOB F	
			ART UNIT 2169	PAPER NUMBER
			NOTIFICATION DATE 08/28/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

TRIPP@AUGUSTLAW.COM  
diane@augustlaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/820,888	<b>Applicant(s)</b> YU, PHILIP SHI-LUNG	
	<b>Examiner</b> Jacob F. Bétit	<b>Art Unit</b> 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-9,11,12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7-9,11,12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2169

## DETAILED ACTION

### *Remarks*

1. In response to communications filed on 16 June 2009, claims 1, 2, 4, and 9 have been amended and claims 3, 10, and 15-17 have been cancelled per the applicant's request. Claims 1, 2, 4, 5, 7-9, 11, 12, and 14 are presently pending in the application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 5, 7-9, 11, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acharya et al. (U.S. patent application publication No. 2005/0071741 A1) in view of Barrett et al. (U.S. patent application publication No. 2003/0135490 A1).

As to claim 1, Acharya et al. a method for searching data comprising:

generating a temporally ranked set of search results of network-based data in response to a query (see paragraph 0033), the step of generating the temporally ranked set of search results comprising:

generating an initial set of search results (see paragraph 0031);

identifying in-links associated with each search result in the second portion of the search results (see paragraph 0071);

Art Unit: 2169

associating a time-based weight with each identified in-link using at least one of a creation time and a publication date for an in-linking source containing that in-link (see paragraph 0074-0076);

assigning an exponential rate of decay to each time-based weight based on a time gap between a current time and at least one of the creation time and the publication date (see paragraphs 0041-0043 and paragraph 0076-79);

assigning an aging factor to each result in the second portion of the initial search results, each aging factor comprising a rate at which the result to which it has been assigned decreases in importance (see paragraphs 0040-0043); and

ranking the second portion of the initial set of search results using the time-based weights and assigned aging factors associated with each search result to generate the temporally ranked set of search results (see paragraphs 0071, 0075, 0076, and 0076-79).

Acharya et al. does not distinctly disclose identifying a first portion of the initial search results having creation dates after a pre-determined threshold date; identifying a second portion of the initial search results having creation dates before the pre-determined threshold date.

Barrett et al. discloses this, see paragraph 0049, where search results are ranked differently based on the amount of time has past to mature results. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Acharya et al. to include the teachings of Barrett et al. because these teachings would allow search results to be ranked differently based on the amount of time they have been around.

Art Unit: 2169

As to claim 4, Barrett et al. as modified, wherein the step of assigning the aging factor further comprises using in-links from in-linking sources associated with a newer group of the identified in-links associated with the second portion of the search results to in-linking sources associated with an older group of the identified links associated with the second portion of the search results to determine the aging factor (see Acharya et al., paragraphs 0043-0044).

As to claim 5, Acharya et al. as modified, teaches further comprising obtaining the time and date information about each in-linking source from meta content associated with that in-linking source (see Acharya et al., paragraphs 0034-0039).

As to claim 7, Acharya et al. as modified, teaches further comprising ranking the first portion of the initial search results based on a reputation associated with authors of each result, a reputation associated with a repository where each result is located or a combination of author and repository reputation (see Acharya et al., paragraphs 0074).

As to claim 8, Acharya et al. as modified, teaches further comprising ranking the initial set of search results based upon the reputation or content of each result (see Acharya et al., paragraphs 0074).

As to claim 9, Acharya et al. teaches a computer readable medium containing a computer executable code that when read by a computer causes the computer to perform a method for searching data comprising generating a temporally ranked set of search results of network-based

Art Unit: 2169

data in response to a query (see paragraph 0033), said step of generating a temporally ranked set of search results comprising:

generating an initial set of search results (see paragraph 0031);

identifying in-links associated with each search result in the second portion of the search results (see paragraph 0071);

associating a time-based weight with each identified in-link using at least one of a creation time and a publication date for an in-linking source containing that in-link (see paragraph 0074-0076);

assigning an exponential rate of decay to each time-based weight based on a time gap between a current time and at least one of the creation time and the publication date (see paragraphs 0041-0043 and paragraph 0079);

assigning an aging factor to each result in the second portion of the initial search results, each aging factor comprising a rate at which the result to which it has been assigned decreases in importance (see paragraphs 0040-0043); and

ranking the second portion of the initial set of search results using the time-based weights and assigned aging factors associated with each search result to generate the temporally ranked set of search results (see paragraphs 0071, 0075, 0076, and 0076-0079).

Acharya et al. does not distinctly disclose identifying a first portion of the initial search results having creation dates after a pre-determined threshold date; identifying a second portion of the initial search results having creation dates before the pre-determined threshold date.

Barrett et al. discloses this, see paragraph 0049, where search results are ranked differently based on the amount of time has past to mature results. Therefore, it would have been

Art Unit: 2169

obvious to one having ordinary skill in the art at the time the invention was made to have modified Acharya et al. to include the teachings of Barrett et al. because these teachings would allow search results to be ranked differently based on the amount of time they have been around.

As to claim 11, see the rejection of claim 4 above.

As to claim 12, see the rejection of claim 5 above.

As to claim 14, see the rejection of claim 7 above.

#### ***Allowable Subject Matter***

4. Claim 2 is allowed.

#### ***Response to Arguments***

5. Applicant's arguments have been fully considered but they are not persuasive.

In response to the applicant's arguments that "[the] combination of Acharya and Barrett does not disclose or teach an exponential rate of decay assigned to each time-based weight that is based on a time gap between a current time and at least one of the creation time and the publication date of the in-linking source", the arguments have been considered, but are not deemed persuasive. Acharya teaches in paragraph 0042 assigning a weight to a document "based on the links that link to/from the document". Paragraph 0076 indicates that the "age distribution associated with the links pointing to a document" can be a factor in giving the rank of the document pointing to another document. Stale documents are considered less valuable than fresh documents. Taking these teachings into account, one of ordinary skill in the art would realize that the calculation of a score for a document linking to the result document could be

Art Unit: 2169

calculated similar to how the actual document is calculated, i.e., the equation given at the end of paragraph 0041. The score of the result document would then be iterative. This would also give an exponential rate of decay for the linking document since this equation is logarithmic.

The applicant states that in Acharya “there is no mention of the user of a time gap between the current time and the creation time or publication date”. However, the original equation in paragraph 0042 states that F may refer to the elapsed time measured from the inception date associated with the document. Further, paragraph 0076 states that the analysis depends, in one embodiment, “on an age distribution associated with the links point to a document. In other words, the dates that the links to a document were created... the age distribution of a stale document will be very different form the age distribution of a fresh document”. While the applicant’s aging factor is a separate element from the time-based weight, the aging factor can be based on the time based weight. That is why similar sections are cited for teaching both elements.

In response to the applicant’s arguments directed towards Barrett, it is believed that the Acharya reference has been used to teach all of these elements. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***



Art Unit: 2169

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob F. B  tit whose telephone number is (571)272-4075. The examiner can normally be reached on Monday through Friday 9:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Tony Mahmoudi/  
Supervisory Patent Examiner, Art Unit  
2169

jfb  
25 Aug 2009